

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	5	cholate? and chromatography and GDH and protein	US-PGPUB; USPAT; DERWENT	OR	ON	2006/05/11 14:07
L2	5	cholate? and chromatography and GDH and GOD	US-PGPUB; USPAT; DERWENT	OR	ON	2006/05/11 14:11
L3	1	cholate? and purification and chromatography and GDH	US-PGPUB; USPAT; DERWENT	OR	ON	2006/05/11 14:11

Thank you in advance for your participation.

\* \* \* \* \* STN Columbus \* \* \* \* \*

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=> file .mymstn

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TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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FILE 'AGRICOLA' ENTERED AT 14:15:59 ON 11 MAY 2006

FILE 'JICST-EPLUS' ENTERED AT 14:15:59 ON 11 MAY 2006

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=> s cholate? and chromatography and protein and purification

L1 946 CHOLATE? AND CHROMATOGRAPHY AND PROTEIN AND PURIFICATION

=> s l1 and GDH

L2 1 L1 AND GDH

=> s cholate? and chromatography and ( GDH or GOD)

L3 1 CHOLATE? AND CHROMATOGRAPHY AND (GDH OR GOD)

=> d ibib l3

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:220451 CAPLUS

DOCUMENT NUMBER: 140:267197

TITLE: Protein purification by hydrophobic  
chromatography and anion exchange  
chromatography

INVENTOR(S): Yamaoka, Hideaki; Kurosaka, Keisuke; Kawase, Shido

PATENT ASSIGNEE(S): Arkray, Inc., Japan; Unitika Ltd.

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

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WO 2004022732 A1 20040318 WO 2003-JP10540 20030820  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,  
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
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FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
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AU 2003262258 A1 20040329 AU 2003-262258 20030820  
EP 1535997 A1 20050601 EP 2003-794088 20030820  
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IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
CN 1751119 A 20060322 CN 2003-824734 20030820  
US 2006094098 A1 20060504 US 2005-526026 20050811  
PRIORITY APPLN. INFO.: JP 2002-253742 A 20020830  
WO 2003-JP10540 W 20030820  
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:220451 CAPLUS  
DOCUMENT NUMBER: 140:267197  
TITLE: Protein purification by  
hydrophobic chromatography and anion  
exchange chromatography  
INVENTOR(S): Yamaoka, Hideaki; Kurosaka, Keisuke; Kawase, Shido  
PATENT ASSIGNEE(S): Arkray, Inc., Japan; Unitika Ltd.  
SOURCE: PCT Int. Appl., 30 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004022732	A1	20040318	WO 2003-JP10540	20030820
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003262258	A1	20040329	AU 2003-262258	20030820
EP 1535997	A1	20050601	EP 2003-794088	20030820
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1751119	A	20060322	CN 2003-824734	20030820
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PRIORITY APPLN. INFO.:			JP 2002-253742	A 20020830
			WO 2003-JP10540	W 20030820
REFERENCE COUNT:	5	THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

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L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

AB A method of purifying a target protein from a solution, in which the target protein containing an electron transfer protein is dissolved, with the use of liquid chromatog. The liquid chromatog. is performed by introducing the above-described protein solution into a tank filled with a packing agent, thus bonding the target protein to the packing agent, removing impurities, and then eluting the target protein from the packing agent with the use of an eluent containing a hydroxycholeanoic acid salt. The liquid chromatog. is performed by combining hydrophobic chromatog. with anion exchange chromatog. Glucose dehydrogenase was purified from the Pseudomonas putida culture by hydrophobic chromatog. and anion exchange chromatog., using sodium cholate as eluent. Toyopearl QAE 550 (quaternary ammonium) was used as anion exchanger.